

ABSTRACT OF THE DISCLOSURE

A terminal structure of a direct electric current superconducting cable of the present invention is such that the end portions of superconducting layers provided over a core material are exposed in a step-by-step manner from an outer layer to an inner layer, and outgoing conductors made of a normal conductive material are individually connected with the exposed end portions of the respective superconducting layers. A direct electric current superconducting cable line has power supplies, loads, and a superconducting cable for supplying electric power from the power supplies to the loads, and at least one end of the superconducting cable has the above-mentioned terminal structure and the outgoing conductors are connected individually with the power supplies or the loads.

By employing the above-mentioned terminal structure of the direct electric current superconducting cable and the direct electric current superconducting cable line, the power transmission of multiple circuits is made possible with a single superconducting cable such that increase of the electric current, decrease of the needed space and decrease of the transmission loss can be achieved.